

Appendix C

Correlated PM₁₀ Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds¹ and PM₁₀ concentrations at select monitoring sites within the Salton Sea Air Basin on June 26, 2014. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

IMPERIAL COUNTY SELECT SITES FIGURES C-1 to C-2

FIGURE C-1
BRAWLEY PM₁₀ CONCENTRATIONS & WIND SPEED CORRELATION

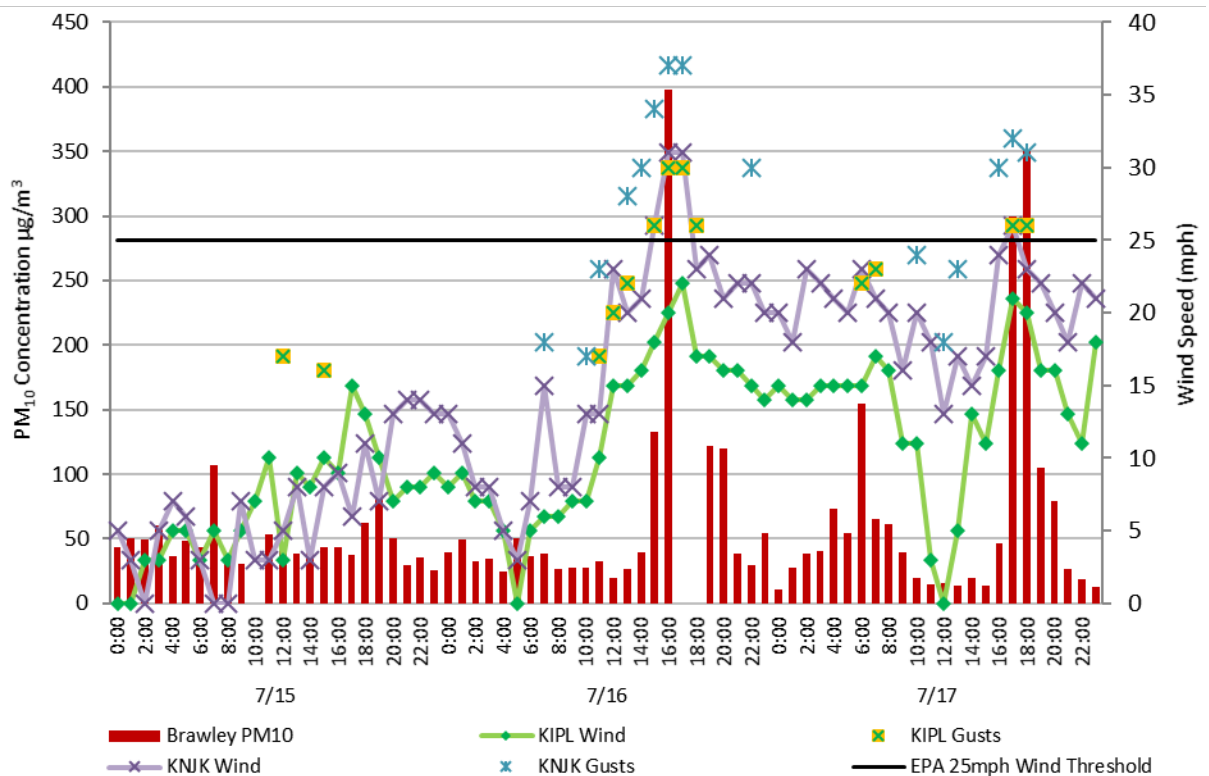


Fig C-1: Brawley station does not collect wind data. Imperial County Airport (KIPL) and El Centro NAF (KNJK) are the two nearest airports. Air quality data from the EPA's AQS system. Wind data from the NCEI's QCLCD system

¹ National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); <https://w1.weather.gov/glossary/index.php?letter=w>

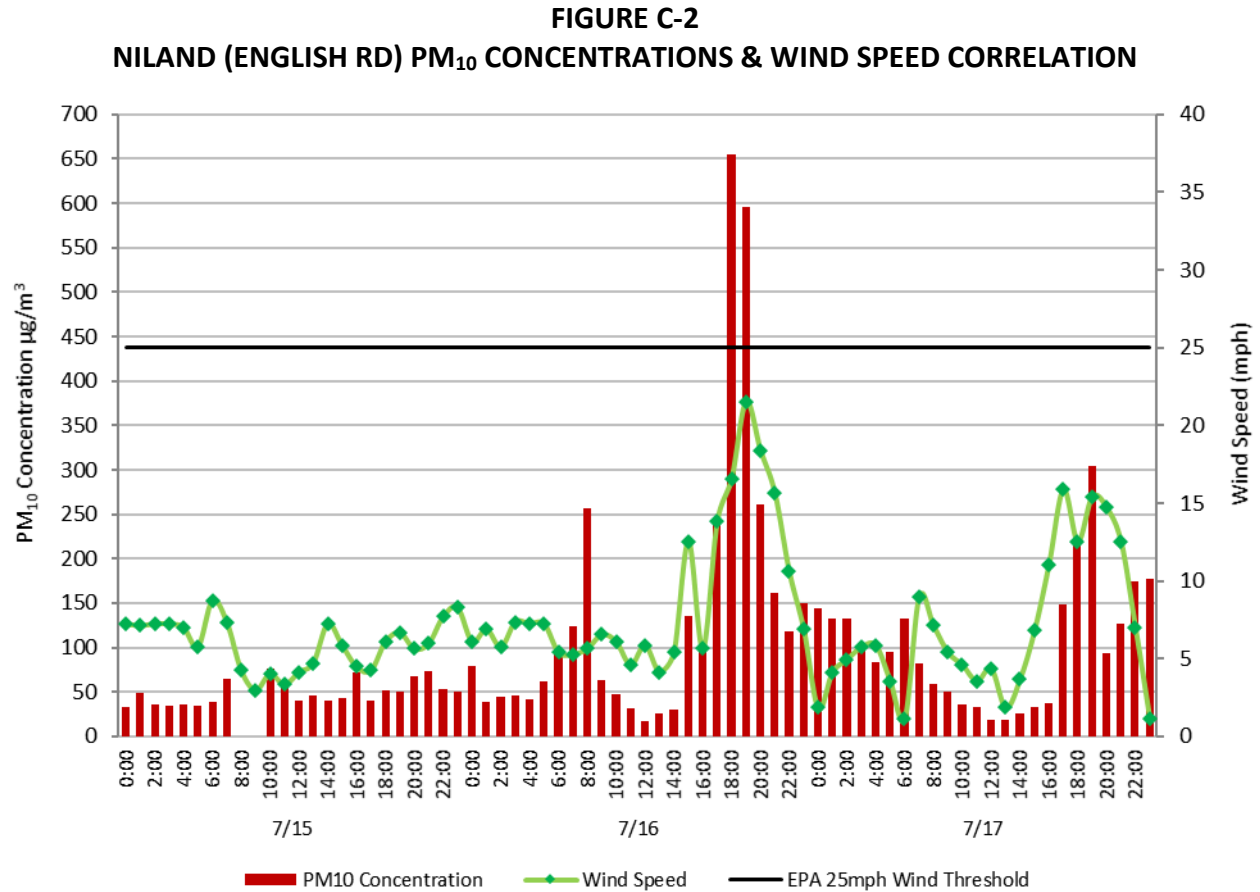


Fig C-2: Niland measured increased levels of PM₁₀ as winds speeds increased throughout the afternoon and evening hours. Air quality and wind data from the EPA's AQS system

RIVERSIDE COUNTY MONITORING SITES

FIGURES C-3 TO C-5

FIGURE C-3

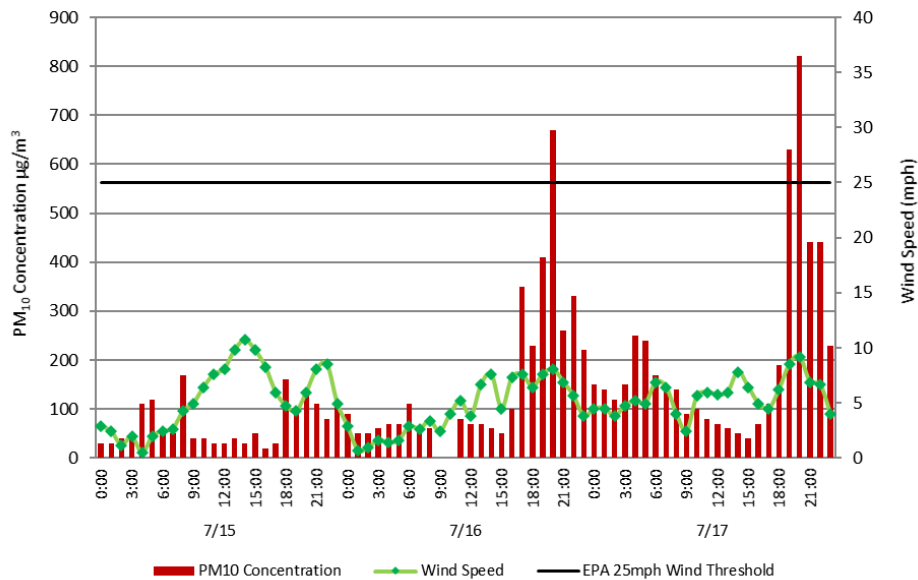
TORRES-MARTINEZ TRIBAL PM₁₀ CONCENTRATIONS & WIND SPEED CORRELATION

Fig C-3: Air quality and wind data from the EPA's AQS system

FIGURE C-4

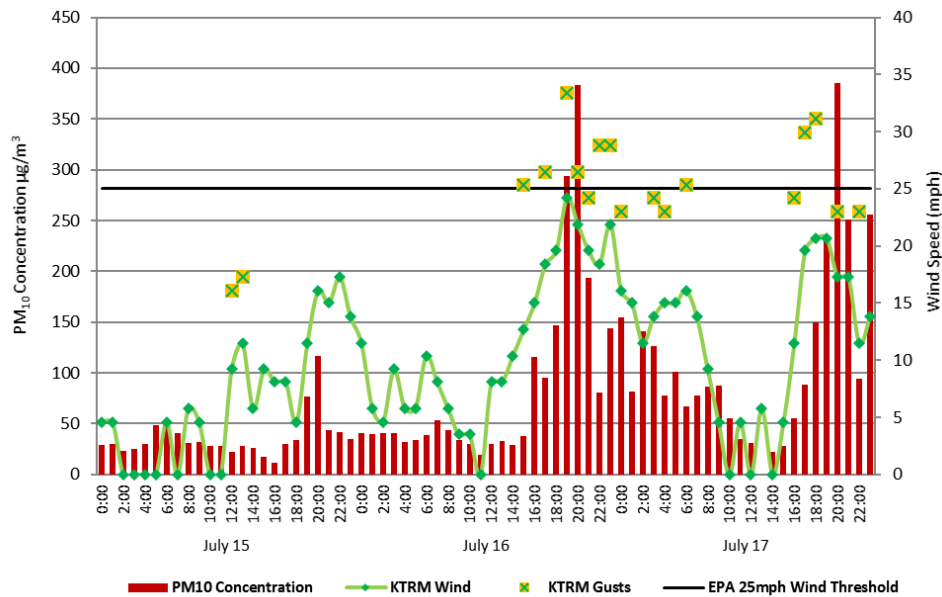
INDIO (JACKSON ST) PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

Fig C-4: Wind data from Jacqueline Cochran Airport (KTRM) from the University of Utah's MesoWest data bank

FIGURE C-5
PALM SPRINGS FIRE STATION PM₁₀ CONCENTRATIONS & WIND SPEED CORRELATION

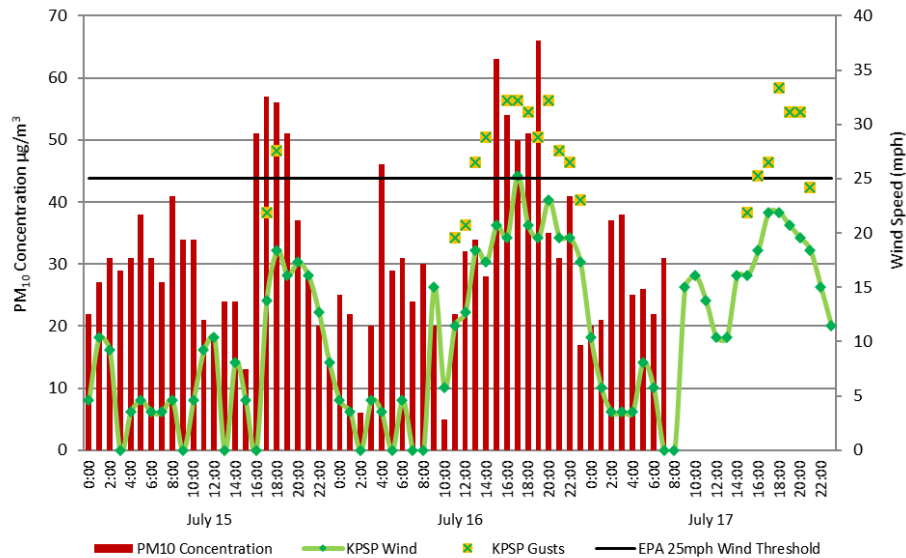


Fig C-5: Wind data is from Palm Springs Airport (KPSP) from the University of Utah's MesoWest data bank

FIGURE C-6
YUMA, ARIZONA SUPERSITE PM₁₀ CONCENTRATIONS & WIND SPEED CORRELATION

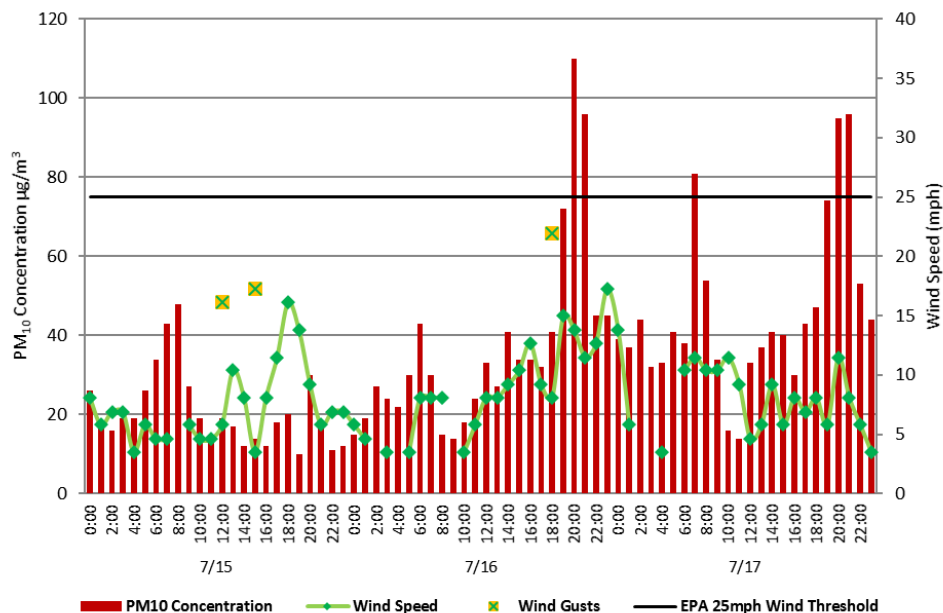


Fig C-6: Elevated concentrations correspond to elevated wind speeds during the afternoon hours. This and the other graphs show the regional impact of the wind event on July 16, 2014